



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,989	03/11/2004	John Kent Peacock	SUN04-03(040699)	5161
7590	07/16/2007			
Barry W. Chapin, Esq. CHAPIN & HUANG, L.L.C. Westborough Office Park 1700 West Park Drive Westborough, MA 01581			EXAMINER CHERY, DADY	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 07/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

10

Office Action Summary	Application No.	Applicant(s)	
	10/797,989	PEACOCK, JOHN KENT	
	Examiner	Art Unit	
	Dady Chery	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 33 is/are allowed.
- 6) Claim(s) 1-6 and 18 -22 is/are rejected.
- 7) Claim(s) 7-16 and 23-32 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1,2,17,18,1,22,34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolety (US Patent 6,996,132, hereinafter Tolety) in the view of McKinnon, III et al. (US Patent 6,993,044, hereinafter McKinnon).

Regarding claim 1, Tolety discloses *in a first data communication device (Fig. 1, 22) that receives data from a second data communication device (15) over a network* (Fig. 1, Col. 4, lines 1 –6), a method comprising:

detecting an actual bandwidth associated with receiving data from the second data communication device (Col. 3, lines 10 –13); The method of determine of the bandwidth rate between a test node and the user communication terminal based on a file receiving at the terminal is considered as the function as detecting an actual bandwidth.

generating a bandwidth metric based on the actual bandwidth associated with receiving the data (Col.8, lines 22- 25), the estimation of the bandwidth based on the queuing delay ands the round trip time RTT is considered as the same function as described by the instant application.

the bandwidth metric identifying a proposed data rate for transmitting future data from the second data communication device to the first data communication device;

transmitting the bandwidth metric to the second data communication device (Col. 3, lines 12 –17) . The transferring of file is considered as transmit the bandwidth metric to the second data.

Tolety fails to teach the bandwidth metric identifying a proposed data rate for transmitting future data from the second data communication device to the first data communication device;

However, McKinnon teaches a method where a receiving node receives a past bandwidth for a user and uses the past bandwidth for forecasting future bandwidth for each user (Abstract). This is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the actual bandwidth as proposed data rate for transmitting future data for the purpose of allocating among plurality of users bandwidth for conveying information across a shared communications medium (Abstract).

Regarding claims 2 and 18, Tolety discloses a method as *wherein detecting the actual bandwidth includes:*

receiving data from the second data communication device; and measuring a rate of receiving the data from the second communication device (Col. 2, lines 59 – Col. 3, lines 9). The determining of amount of bandwidth is considering as detecting and

measuring the actual bandwidth, the determining of amount of time it takes to measure the amount of bandwidth is considered as measuring a rate.

Regarding claims 3 and 19, Tolety discloses a method as further comprising:

identifying a round trip time associated with communications between the first data communication device and the second data communication device; generating the bandwidth metric based on the actual bandwidth as well as the round trip time associated with communications between the first data communication device and the second data communication device (Col. 7, lines 61 – Col. 8, lines 25 and equation F6). Where Tolety discloses a method to determine the minimum time it takes for the information to traverse the path (RTT), and generating a bandwidth based on the measuring bandwidth and the RTT as described by the instant application.

Regarding claims 6 and 22, Tolety discloses a test node (22) that is considered as the first data communication which is also a thin client having majority of data processing associated with the user terminal as described by the instant application (Col. 4, lines 22 –29)

Tolety also discloses utilizing the data received from the second data communication device to control a human interface device associated with the thin client (col. 5, lines 2 –35). Where the keyboard, the mouse and touch screen are considered as human interface.

Regarding claims 17 and 34, Tolety discloses in a first data communication device (Fig. 1, 22) that receives data from a second data communication device (15) over a network (Fig. 1, Col. 4, lines 1 –6), that adaptively allocates bandwidth to a second data communication device for transmitting data over a network susceptible to congestion (Col. 1, lines 14 –25), the computer system including:

a processor;

a memory unit that stores instructions associated with an application executed by the processor;

a communication interface that supports communication with nodes in the network;

and

an interconnect coupling the processor, the memory unit, and the communication interface, enabling the first data communication device to execute the application and perform operations (Col. 5, lines 6 –45) of:

detecting an actual bandwidth associated with receiving data from the second data communication device (Col. 3, lines 10 –13); The method of determine of the bandwidth rate between a test node and the user communication terminal based on a file receiving at the terminal is considered as the function as detecting an actual bandwidth.

generating a bandwidth metric based on the actual bandwidth associated with receiving the data (Col. 8, lines 22- 25), the estimation of the bandwidth based on the queuing delay ands the round trip time RTT is considered as the same function as

described by the instant application.

the bandwidth metric identifying a proposed data rate for transmitting future data from the second data communication device to the first data communication device;

transmitting the bandwidth metric to the second data communication device (Col. 3, lines 12 –17) . The transferring of file is considered as transmit the bandwidth metric to the second data.

Tolety fails to teach *the bandwidth metric identifying a proposed data rate for transmitting future data from the second data communication device to the first data communication device*;

However, McKinnon teaches a method where a receiving node receives a past bandwidth for a user and uses the past bandwidth for forecasting future bandwidth for each user (Abstract). This is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the actual bandwidth as proposed data rate for transmitting future data for the purpose of allocating among plurality of users bandwidth for conveying information across a shared communications medium (Abstract).

The test node (22) and the node (15) are considered as the means for generating, detecting and transmitting the bandwidth.

Regarding claim 35, Tolety discloses a *computer program product including a computer-readable medium having instructions stored thereon for processing data information, such that the instructions, when carried out by a processing device, enable the processing device* (Col. 2, lines 45 –53) to perform the steps of:

detecting an actual bandwidth associated with receiving data from the second data communication device (Col. 3, lines 10 –13); The method of determine of the bandwidth rate between a test node and the user communication terminal based on a file receiving at the terminal is considered as the function as detecting an actual bandwidth.

generating a bandwidth metric based on the actual bandwidth associated with receiving the data (Col. 8, lines 22- 25), the estimation of the bandwidth based on the queuing delay ands the round trip time RTT is considered as the same function as described by the instant application.

the bandwidth metric identifying a proposed data rate for transmitting future data from the second data communication device to the first data communication device;

transmitting the bandwidth metric to the second data communication device (Col. 3, lines 12 –17) . The transferring of file is considered as transmit the bandwidth metric to the second data.

Tolety fails to teach *the bandwidth metric identifying a proposed data rate for transmitting future data from the second data communication device*

to the first data communication device;

However, McKinnon teaches a method where a receiving node receives a past bandwidth for a user and uses the past bandwidth for forecasting future bandwidth for each user (Abstract). This is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the actual bandwidth as proposed data rate for transmitting future data for the purpose of allocating among plurality of users bandwidth for conveying information across a shared communications medium (Abstract).

5. Claims 4,5,20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tolety in the view of McKinnon as applied to claim 1 above, and further in view of Lund et al. (US Application 2004/0202182, hereinafter Lund).

Regarding claims 4, 5, 20 and 21 Tolety discloses a *method in further comprising:*
receiving the data from the second data communication device (Col.

4, lines 1 –6) with communication protocol such as UDP which is a non acknowledgement network TCP/IP (Col. 6, lines 10 23).

Tolety fails to teach

i) in accordance with the proposed data rate identified by the bandwidth metric,

However, Lund teaches a method of receiving data in accordance with a data rate identified by a bandwidth metric (Page 1, [008]).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to receive the data based on the data rate in accordance with the bandwidth metric for the purpose of allocate a network traffic based on of balance capacity (Abstract).

Allowable Subject Matter

6. Claims 7 –16 and 23- 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 33 is allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Spell (US Patent 6,208,640) discloses a Predictive Bandwidth allocation method and apparatus.

Mogul (US Patent 6,560,243) discloses a System and method for receiver-based allocation of network bandwidth.

Aras et al. (US Patent 5,884,037) discloses a System for allocation of network resources.

Barnhardt (US Patent 6,947,445) discloses an Available bandwidth control mechanism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dady Chery whose telephone number is 571-270-1207. The examiner can normally be reached on Monday - Thursday 8 am - 4 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dady Chery 07/03/2007



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER